

## PROCEEDINGS OF THE CLUB

OCTOBER 27, 1909

This meeting was held at the New York Botanical Garden and was called to order at 3:30 P. M. by Dr. E. B. Southwick.

About forty persons were present. After the reading of the minutes of the preceding meeting, the scientific program was presented, the first contribution being made by Mrs. N. L. Britton, who spoke on "Arctic Mosses." The speaker's remarks were based on studies of mosses sent from the American Museum of Natural History to the New York Botanical Garden for determination. They were collected by Comm. Robert E. Peary in Grant Land in 1902, and by Dr. L. J. Wolf at Wrangle Bay, Lincoln Bay, and Grant Land in 1906. The Peary collection includes 62 bryophytes, of which 57 were mosses, representing 24 genera, and 5 were hepatics.

Specimens of flowering plants were also exhibited which have recently been acquired by the New York Botanical Garden through the courtesy of the Peary Arctic Club from the American Museum of Natural History.

The collection consists of herbarium specimens made on the late expedition of Comm. Peary to the North Pole and were collected mostly by Dr. J. W. Goodsell. While some of these were obtained on the northern coast of Labrador, the majority were collected on Grant Land, in the northern portion of Ellesmere Land, an island off the coast of Greenland. One of the packages contained specimens from perhaps the most northern locality where flowering plants have ever been found, while another is from Etah, the most northern habitation of man.

Since the subject of mosses was the principal topic of the hour, Dr. Murrill referred briefly to the genus *Dictyolus*, the species of which are found on living mosses. This genus belongs to the Chanterleae, a tribe of gill-fungi, and there are only two species known in North America, *D. muscigenus*, occurring from Greenland to South Carolina, and *D. retirugus*, known from Greenland, Alaska, Minnesota, and California. Both species are small and thin, grayish or brownish in color and have folded-like gills. *D.*

*muscigenus* may be recognized by its distinct stripe and dichotomous gills, while *D. retirugus* is sessile or subsessile with branched, reticulate gills.

Dr. N. L. Britton spoke of the three genera of Cactaceae, *Carnegiea*, *Pachycereus*, and *Cephalocereus*, and showed specimens of their flowers. The genus *Carnegiea*, dedicated to Mr. Andrew Carnegie and formerly known as *Cereus giganteus*, consists of a single species. Some of these plants attain a height of sixty feet and branch at from twelve to twenty feet above the ground. The flowers are funnel-form with a nearly cylindrical tube, bearing a few broad triangular scales. *Pachycereus* blooms at a different season from *Carnegiea* and the perianth-tube is clothed with woolly hairs and bristles.

*Cephalocereus* which has many representatives in the West Indies and some in Mexico, derives its name from the fact that the top of the plant is hairy. At Key West, Florida, there is a colony of *Cephalocereus keyenses* which is related to some of the Cuban and Bahaman species. It is the only locality where this species is known to exist. As it is growing here on a Government reservation, it will most likely be preserved.

Mr. Roland M. Harper told of his experiences in the south from July, 1908, to July, 1909. A few weeks were spent at the Biltmore Forest School, North Carolina. Specimens were observed here of *Helonias bullata* and *Dalibarda repens* which are not listed in Small's Flora of the Southeastern United States. The former was reported several years ago by F. E. Boynton, while the latter was noticed by Dr. Homer D. House.

Six weeks were spent in Georgia particularly in the vicinity of Pine Mountains and among the sand-hills of the fall line region, where he found *Chamaecyparis thyooides* which has not previously been reported from the state. Specimens of *Chrysopsis pinifolia*, discovered by Elliott in 1815, and known only from one county, were collected and also a twining *Bartonia*. Together with a party of geologists, Mr. Harper made a trip of 260 miles on the Warrior and Tombigbee Rivers in Alabama, which occupied a period of ten days. Here he collected an *Equisetum* which resembles *E. arvense*, but is several hundred miles out of the range

of that species. While in Florida studying peat for the State Geological Survey, he found several interesting plants, *Spartina Bakeri* which is very common but not mentioned in any flora, and an arborescent *Serenoa serrulata*, some plants of which attained a height of ten feet, and an undescribed species of *Prunus*. Mr. Harper explored the southern end of the Everglades following about the same route as that taken by Dr. Britton in 1904 and Dr. Small in January of this year.

After the scientific communications, Mr. Ernest D. Clark, 401 West 117th Street, New York City, was elected a member of the Club.

Dr. Southwick reported the finding of *Viola pedata* in flower, October 25.

Adjourned.

PERCY WILSON,  
Secretary

NOVEMBER 9, 1909

The meeting was held at the American Museum of Natural History with Vice-president Barnhart in the chair. Eighty-nine persons were present.

The scientific program of the evening consisted of a talk by Dr. Marshall A. Howe on "Some Floral and Scenic Features of Porto Rico." This was a semi-popular account of some of the more striking features of the native and introduced flora of the island and was illustrated by about a hundred lantern-slides, some of which showed, incidentally, many interesting topographic and scenic details of the Porto Rican mountains and sea coast. Special attention was given to the native palms and their economic uses. The photographs shown included, also, several of the cacti, which are much in evidence in certain places along the southern shore of Porto Rico and on the adjacent island of Culebra. In striking contrast with the xerophytic vegetation of the southern slopes are the mesophytic forests, now, unhappily, of very limited extent, on two or three of the highest mountains. The soil of the island is or has been very nearly all under cultivation, but in addition to the two or three comparatively small forested areas, there are, here and there, in various parts of the

island, rocky hills where the native vegetation may be found under very nearly natural conditions. The sugar, coffee, and tobacco industries were also discussed and illustrated by the speaker.

Adjourned.

PERCY WILSON,  
*Secretary*

## OF INTEREST TO TEACHERS

### THE HIGH SCHOOL UNIT IN BOTANY

The report of the meeting of the committee of the North Central Association of Colleges and Secondary Schools appointed to define the unit in botany for the North Central Association of Colleges and Secondary Schools has not been given in *TORREYA*, although the meeting was held last June. The committee consists of over twenty members, and includes seven college or university professors, one city school superintendent, one normal school representative, and thirteen high school teachers.

A full year's work is required to fill the college entrance requirements; the year being defined as the equivalent of 180 periods of 45 minutes each, "in the clear," for the class room; double laboratory periods, which count as one recitation period, being recommended at least twice a week. The second year of high school is the earliest year for botany approved by the committee. It was decided that the high school course should include plant physiology, plant ecology, including field work, and work with the "lower forms" or cryptogams as well as the leading families of seed-bearing plants.

The informal discussion which followed the meeting suggests the following as the minimum preparation for the well-equipped high school teacher of botany: At least two years of botanical study including the morphology of the lower and higher plant forms, plant physiology, ecology, including a thorough knowledge of the flora in the region where taught, plant diseases, and a general course in bacteriology. Some work in zoölogy and physiography is also considered essential.